



SR/DFW 01

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rapid mat

Uncoupling Matting for floors with limited movement

DESCRIPTION

BAL RAPID MAT is an uncoupling matting to accommodate lateral movement for tile installations on floors with limited movement when used as a system, with a recommended BAL flexible cementitious adhesive.

Use for

- Installation of ceramic and porcelain tiles, slabs, natural stone and concrete pavers.
- Counteracts and therefore minimises tension stresses between the substrate and the floor to be installed.
- Prevents reflective cracking caused by shrinkage cracks, board joints and lateral movement.
- Provides crack bridging and allowing a safe installation onto challenging substrates.
- Suitable for internal flooring; renovation and new construction, domestic and commercial areas in medium/heavy duty applications.
- Suitable for bathroom and kitchen areas.
- Recommended for heated floors and timber floors.

Restrictions: NOT suitable for

- Exterior environments.
- Permanently wet environments.
- Substrates with deflection (vertical movements).
- Use on parquet flooring.
- Bridging movement joints.

TEMPERATURE RESISTANCE

-30°C to 90°C **N.B** Tiling should not be carried below 5°C

PRODUCT INFORMATION

Composition: Two layers of non-woven polypropylene with an inner layer of glass filament.

Colour: Red

Pack sizes: 30m rolls

Sheet Width: 1m

Sheet Thickness: 0.85 mm

Sheet Weight: approx. 270g/ m²

Roll Weight: approx. 8.5kg

Additional Benefits:

- Fast-track system: tiling can be carried out immediately.
- Reduced adhesive consumption relative to cavitybased mats.
- Minimal mat compression with providing increased loading capacity on floors following installation. compared to uncoupling mats with cavities.
- Lightweight matting: only 8.5kg per roll.
- Easy to install i.e. cut and place.
- Minimises height building-up with only 1mm thicknes.s
- Can be stored for approx. 24 months in dry rooms, away from direct sunlight.

MAY BE TILED: Immediately

SURFACE PREPARATION General

Ensure surfaces to be tiled are flat to SR1 tolerance as recommended in BS 5385: Part 3. Substrates must be clean, dry, sound and free from contamination and stable enough to receive tiling.

The surface must be levelled to SR1 prior to installation. Uneven surfaces must be primed and levelled with BAL primers and levelling compounds prior the installation of RAPID-MAT using suitable BAL Flexible cement-based adhesive.

The BAL RAPID-MAT is suitable for bridging static cracks less than 2 mm wide if differences in height can be excluded.

Always ensure the correct adhesives and grouts are selected for the installation.

BAL RAPID-MAT can be used in internal wet floor areas when used with BAL TANK-IT or BAL WATERPROOF 1C (no priming required on to BAL RAPID-MAT).

IMPORTANT NOTE: Do NOT install BAL RAPID-MAT or tiles in temperatures below 5°C.

GENERAL PROPERTIES AND AREAS OF APPLICATION

BAL RAPID-MAT absorbs the lateral movement tensions from the substrate and bridges stress cracks to prevent movement being transferred to the surface covering. Its resistance to stresses should be examined separately based on the expected concentration, temperature and exposure time.

BAL RAPID-MAT can be used in a broad range of installations; however, its suitability for specific mechanical conditions must be evaluated for each individual case. As some general guidelines BAL RAPID-MAT can be applied to:

Concrete and Cement Sand Screeds

- Allow concrete to dry for a minimum of 6 weeks (at 20°C).
- Allow cement: sand screeds to dry for a minimum of 3 weeks (at 20°C).

Allow OPC based cement: sand screeds to dry to a moisture content of less than <2% Carbide Method before fixing commences

- For screeds containing BAL QUICKSET CEMENT, allow to dry to a moisture content of less than <2% w/w Carbide Method before fixing commences.

Please refer to the BAL QUICKSET CEMENT data sheet for typical drying times.

All dirt, dust laitance must be removed using suitable mechanical methods followed by use of suitable vacuuming equipment. If levelling is required, prime using BAL PRIME APD (Diluted 1:1 by volume with water) followed by the application of a suitable BAL levelling compound such as BAL LEVEL MAX/BAL LEVEL FAST. Allow to dry.

BACKGROUNDS / BASES

Concrete (1)(2)(3)	✓	Cement:Sand Screed (1)(2)	✓
Anhydrite/Calcium Sulfate Screeds (2)(8)(9)	√	Unglazed Ceramic Tiles / Hard Natural Stone (2)	√
BAL BOARD/Tile Backer/Fibre Cement Boards (2)(3)(9)	✓	Overlaid Timber Floors – 15mm min. (2)(3)(6)	✓
Mastic Asphalt (2)(7)	✓	Timber Floors (2)(3)	✓
Vinyl Tiles/Sheets (2)	✓	Glazed Tiles (2)(4)	✓

USAGE & SERVICE CONDITIONS

Walls	×	Floor	✓
Interior	✓	External	×
Dry	✓	Wet Areas (5)	✓
Chemical Resistance	×	Shower Floor (5)	✓
Swimming Pools	×	Medium/ Heavy Duty	✓
Underfloor Heating Systems (1)(3)(9)	✓	Limited Movement/Vibration	✓

APPLICATION AREAS

Leisure Centres	✓
Bathrooms	✓
Changing Rooms	✓
Car Showrooms	✓
Domestic Kitchens	✓
Shopping Malls	✓
Heated Floors	✓
Wet Rooms	✓

- (1) Floor must be even and load bearing and prepared to SR1 standard such a BAL LEVEL MAX or BAL LEVEL FAST.
- (2) All tiles must be solidly bedded in a suitable BAL Flexible tile adhesive.
- (3) Prime with BAL PRIME APD. (See BAL TECHNICAL DATA SHEET for more information).
- (4) When modified with BAL ADMIX AD1, Pre-diluted 1:3 with water by volume with BAL RAPID-FLEX ONE.
- (5) In wet conditions tank out with BAL TANK-IT or BAL WATERPROOF 1C (No Priming required).
- (6) Seal back face and edges with undiluted BAL BOND SBR.
- (7) Check suitability of the grade of asphalt (flooring grade only).
- (8) Prime with BAL PRIME APD, first coat 1:1 with water by volume, second coat undiluted $90^{\rm o}$ to the first coat.
- (9) Check suitability for the intended purpose with the manufacturer or check BAL TECHNICAL DATA SHEETS on any BAL Products.

Tongue and Grooved Timber/Single Layer Plywood

Ensure all sheets/T&G boards are sufficiently rigid and free from deflection. The moisture content of the timber must be the same as moisture conditions on site and the floor must be adequately ventilated underneath. Sheets/T&G boards must be securely fixed i.e. with suitable screws to the joist and any additional noggins which may be required at 300mm centres.

All vanishes/ lacquers and other surface coatings must be removed e.g. by sanding and all dust removed. Prime T&G Boards with 2 coats of undiluted BAL PRIME APD applied at 90° to each other. Allow to dry between coats. Plywood sheets must be of a suitable moisture resistant grade. To BS EN Prime the back face and edges of the boards with e.g. undiluted BAL BOND SBR. Further advice should be sought from BS 5385: Part 3 2014

Calcium Sulfate/Anhydrite (Gypsum)Based Screeds

Allow the screed to dry out in accordance with manufacturer's instruction example: moisture contact below 0.5% w/w or 75% RH (Relative Humidity). Mechanically remove top surface to remove weak/dusty surface layer(s) as per the screed manufacturer's recommendations. Remove all dust and loose material e.g. by vacuum etc. before priming with 2 coats of (second coat applied at 90° to the first):

- BAL PRIME APD diluted 1:1 with clean water and second coat undiluted or
- BAL BOND SBR diluted 1:4 with clean water and second coat diluted 1:2 with clean water.

Allow each coat of primer to dry.

NOTE: For further information on other backgrounds and preparation, contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.

Mastic Asphalt (Internal Grade)

Before tile fixing commences the asphalt base should be examined to ensure that it is in a suitable condition to receive tiles; in particular, it should have adequate cohesive strength and should be laid on a firm and rigid base. Sand rubbed surfaces should be carefully examined to ensure all loose sand or debris is completely removed from the surfaces prior to the commencement of tiling. The Asphalt must be level i.e. to SR1 tolerance before application of BAL RAPID-MAT.

Existing vinyl tiles

Ensure these are in good sound condition and securely bonded to their base.

Remove loose or damaged tiles/areas of sheet along with any loose or soft adhesive.

Remove any polishes, wax, grease etc. with a suitable proprietary cleaner.

NOTE: Cushioned types of flooring are not suitable and must be completely removed along with the adhesive residue prior to tiling.

Fibre reinforced cement boards and lightweight tile backer boards

Install boards to BS 5385 – i.e. moisture-resistant boards such as BAL BOARD and screwed to seasoned timber or suitable proprietary framework at maximum 300mm centres vertically and horizontally or as per the board manufacturer's recommendations (see BAL TECHNICAL DATA SHEET on BAL BOARD for further information).

Ensure no fixings protrude.

Some boards may require priming, prior to tiling with a cementitious based tile adhesive. Use a suitable primer from the BAL range such as BAL PRIME APD diluted 1:1 with water by volume. Please refer to the BAL TECHNICAL DATA SHEETS for further information. IMPORTANT NOTE: Obtain manufacturer's confirmation that boards are suitable for the tiling application and for relevant fixing instructions.

Existing glazed/unglazed ceramic tiles, quarry tiles, terrazzo and natural stone

For floors ensure that the existing finish is firmly adhered to the base. If areas are loose or hollow-sounding, remove and make good with BAL QUICKSET RENDER or 1:3 cement:sand mortar over a slurry bonding coat (1 part sand to 1 part cement by weight, mixed with appropriate amount of BAL BOND SBR prediluted 1:1 by volume with clean cold water to achieve desired consistency). N.B. Suitable for existing glazed tiles/brickwork when adhesive has been modified with BAL ADMIX AD1 (prediluted 1:3 by volume with clean cold water).

Heated Cement: Sand Screeds

 Allow cement: sand screeds to dry for a minimum of 3 weeks (at 20°C) and conditioned in accordance with BS requirements

Please refer to the BAL QUICKSET CEMENT data sheet for typical drying times. All dirt, dust laitance must be removed using suitable mechanical methods followed by use of suitable vacuuming equipment. If levelling is required, prime using BAL PRIME APD (Diluted 1:1 by volume with water) followed by the application of a suitable BAL levelling compound such as BAL LEVEL MAX. Allow to dry before installing BAL RAPID-MAT. Ensure that the underfloor heating system has been correctly pressurised and fully commissioned in line with British Standards requirements.

Undertile Floor Heating

Can be used onto electrical undertile heating systems encased within an appropriate BAL leveller. Over suitable boards (such as BAL BOARD)/water resistant grade plywood overlays (minimum 15mm thickness) use BAL LEVEL MAX or BAL LEVEL FAST. Allow to dry before installing BAL RAPID-MAT

BAL LEVELLER	THICKNESS	SETTING TIME	
BAL LEVEL MAX	2mm – 80mm*	3 – 4 hours	
BAL LEVEL FAST	2mm – 30mm	30 – 45 minutes	
BAL ACRYBASE	Up to 20mm	3 – 4 hours	

See BAL TECHNICAL DATA SHEET for further information on suitable surfaces and application. *Up to 80mm in localised areas only. Thicker layers must also be tiled within 48 hours.

APPLICATION

- 1. The substrate must be even and load bearing.
- If necessary, the floor may require priming with BAL PRIME APD or levelled using a suitable BAL Smoothing and levelling compound such as BAL LEVEL MAX.
- Roll out the BAL RAPID -MAT from the corner and cut them precisely to the required length and sizes as required for the floor. Trim off any excesses around up-stands using scissors or a utility knife.
- Apply a thin bed of a suitable BAL flexible tile adhesive to bond the BAL RAPID- MAT which is appropriate for the substrate to be tiled. Use a 4 mm notched trowel.
- 5. Roll back and lay the BAL RAPID-MAT into the freshly applied BAL flexible tile adhesive. The mat must be fully engaged into the adhesive to provide a suitable bond and applied within the open time of the adhesive. If the adhesive has started to skin or set, remove this layer of adhesive and re-apply a fresh layer.
- To ensure full adhesion is achieved between the BAL RAPID-MAT and the BAL flexible tile adhesive, smooth out the matting using either the flat edge of a steel trowel or a suitable float. Eliminate any air pockets.
- Where additional rolls / membrane is needed on the floor, ensure the separate mats are butt jointed at the edges but not overlapped. Remove any excess tile adhesive which may have squeezed through the joints.

N.B The matting must always be separated where a change in substrate occurs, or a construction/movement joint is present in the background. Continue the movement joint through to the tiles finish.

NOTE: Following application of the BAL RAPID-MAT and the commencement of tiling. Care should be taken to ensure that the membrane does not lift and debond from the tile adhesive layer below.

- To apply tiles, mix and apply the adhesive to the mat using a minimum 10mm notched trowel. If using a 20mm notched trowel (large format) ensure the final bed thickness of the tile does not exceed 6mm over the BAL RAPID-MAT.
- 9. If a BAL flexible rapid-setting cementitious based adhesive is used the tiles can be applied immediately.
- 10. Always take care when applying the layer of adhesive and tiles onto the mat to avoid de-bonding the mat.
- Ensure you follow all required fixing instructions for the adhesive used and all applicable industry standards.

TECHNICAL ADVISORY SERVICE

For free expert guidance on use of this product, or any aspect of tiling, contact the BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE on Tel: 01782 591120 or 03330 030160 or Email: info@building-adhesives.com

SHELF LIFE

48 months under normal dry conditions. Protect from frost, damp and sunlight.

QUALITY AND ENVIRONMENTAL STANDARDS Manufacturing quality assurance standards conform to BS EN ISO 9001. Satisfies the environmental management requirements and operational scope of ISO 14001.

25 YEAR GUARANTEE

All BAL products are supplied with a 25-year product guarantee to be free from manufacturing defects and to be fit for purpose. The guarantee covers materials replacement costs and labour. This guarantee is subject to use of product in accordance with BAL's instructions and technical data, and good working practice. No liability can be accepted for any loss or damage arising from incorrect use of products or poor workmanship, over which BAL has no control. While products may be suitable for installations internally or externally, products when used externally are exempt from cover under the BAL 25 Year Guarantee. Terms and conditions apply. Full details are available for your review at www.bal-adhesives.com.

CONDITIONS OF SALE

Sold subject to the Company's Conditions of Sale. *Available on request*.

For sales and technical queries, contact:

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